## AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method for non-random selection of a raw plant product of, selected a plant for processing into a uniform quality end product comprising the steps of:

    (a)    obtaining one or more samples of the raw plant product of the selected plant from a customer;

    (b)    analyzing the one or more samples to determine at least one structural or functional index associated with the raw plant product by means of an imaging system that is selected from one or more of the group consisting of a light microscope, fluorescent microscope, spectral microscope, hyper-spectral microscope, electron microscope, confocal microscope, optical coherence tomograph, spectral telescope, x-ray spectrometry, microtomy, nuclear magnetic resonance (NMR), inductively coupled plasma (ICP), ICP-mass spectrometry, scanning fluorimetry, magnetic resonance imaging (MRI), and ultrasound;

    (c)    providing a plurality of product processing records, wherein each of the records associates a given set of product processing data with a corresponding product processing feature range set representative of the selected raw plant product, and wherein, for each such record, the uniform quality end product results from the manufacture of the raw plant product with the application of the given set of product processing data to raw plant product falling within the associated product processing feature range set;

    (d)    determining the suitability of the one or more samples obtained in step (a) for processing into the uniform quality end product by comparing the at least one structural or functional index to the product processing feature range sets in the records; and

    (e)    if the at least one structural or functional index matches one of the product processing feature range sets in the records then, selecting the raw plant product so that when processed under the given set of product processing data, the selected raw plant product results in the uniform quality end product.

2.      (Currently Amended)  The method of claim 1, wherein the selected <u>raw</u> plant product is a group of fruits, a group of tubers, a group of seeds, a group of leaves, a group of vegetative buds, a group of inflorescences, a group of nuts, a group of plant embryos, or a group of living tissue specimens having common characteristics ~~of the selected plant~~.

3.      (Cancelled)

4.      (Cancelled)

5.      (Previously presented)  The method of claim 1, wherein the at least one structural or functional index is a plant macrophenomics index or a plant microphenomics index.

6.      (Cancelled)

7.      (Original)  The method of claim 1, wherein the at least one structural or functional index includes a qualitative feature.

8.      (Original)  The method of claim 1, wherein the at least one structural or functional index includes a quantitative feature.

9.      (Original)  The method of claim 1, wherein said processing data include bioprocessing data.

10-49.  (Cancelled)

50.     (New)  The method of claim 1, wherein said processing data is specific mill time, specific heat time, specific heat temperature, or amount of heat.

51.     (New)  The method of claim 1, wherein said processing data is non-biological.